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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/621,557

Applicant(s)

FISCHER ET AL.

Examiner

PETER CHENG

Art Unit

2463

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 11, 2010 has been entered.

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. **60/396,691**, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application.

In this case, **claim 1, 6, 11 and 16** recites, (said first frame) “uses **a first address as a medium access for said station**”, (said second frame) “uses said first address **as the medium access control address for said station**”, (said third frame) uses a second address **as the medium access control address for said station**”. **Claims 3, 8, 13, and 18** recite “**transmitting a fourth frames to said station via said local area network, wherein said fourth frame uses said second address as the medium access control address for said station in said local network**”. However, prior-filed application, Application No. 60/396,691 fails to support above mentioned **BOLD** claimed invention.

In general, applicant’s “description of invention section” discloses utilizing of global-unique MAC address according to standard IEEE 802.11 protocol, “A) basic address generation” section discloses transmission of IEE-802 MAC address (i.e. corresponding to creation of first frame per claims), “B) address regeneration” section discloses generation new address causing excessive overhead, “C) address disambiguation for infrastructure networks” discloses associating MAC and AID according to various IEEE 802.11 standards (i.e. corresponding to creation of second frame per claims), and “D) address disambiguation for independent networks and direct communication” discloses changing transmission of MAC addresses if required, distinguishing utilizing random value, creating a new MAC address, and transmission of

new addressed (i.e. corresponding to transmission of first and second frames per claims).

In particular, prior-filed provisional application section D, step 1 discloses “nearby station solicitation frame”, which applicant asserts as “a first frame”, but the provisional application fails to support a first frame uses the first address as “the medium access control address”. Step 2 discloses “nearby station solicitation frame”, which applicant asserts as “a second frame”, but the provisional application fails to support a second frame uses the first address as “the medium access control address”. Step 3 discloses “a direct management action frame requesting the recipient” to generate the address, which applicant asserts as “a third frame”, but the provisional application fails to support a third frame uses the second address as “the medium access control address”. Step 4 discloses nearby station receiving “an address change request action frame”, which was transmitted by initiator as “a directed management action frame” that requesting to change the address. Thus, “a direct management action frame” transmitted by initiator is received by the nearby station as “an address change request action frame”, and clearly both frames are the same, which applicant asserts third frame, and the provisional application fails to support a third frame uses a second address **as the medium access control address for said station**. Note that “requesting to generate a MAC address” in the provisional application is not the same as “a third frame using a second address as MAC address for said station”.

Finally, section D, Step 4 discloses as follows:

“station receiving a address changed request action frame <i.e. a third frame> with their MAC address only accept and act on that frame if the random token value

matches the value in the last nearby station response frame <i.e. second frame> sent by that station. Otherwise they leave their MAC address unchanged”

Clearly, in view of the above, the provisional application fails to support the claimed invention “**transmitting a fourth frames to said station via said local area network, wherein said fourth frame uses said second address as the medium access control address for said station in said local network**” since there is no “fourth frame”, *inter alia*, being transmitted. (***NOTE-This issues has been raised in previous action***).

Response to Arguments

2. Applicant's arguments with respect to independent claims 1, 6, 11 and 16 have been considered but are moot in view of the new ground(s) of rejection.
3. The claim objections for claims 16-20 are withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-3, 5-8, 10-13, 15-18, 20-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,804,232 B1 to Donaghey, in view of U.S. Patent No. 5,519,706 to Bantz et al.

6. **Regarding Claim 11**, Donaghey discloses an apparatus (see FIG. 1, 2, Hub 110) processing a method (see FIG. 11, method) comprising:

a receiver (see FIG. 2, a receiving means in a RF transceiver 230; see col. 4, line 40-15) configured to:

receive a first frame (see FIG. 11, S1120-1130, receiving/listening attached request frame) from a station (see FIG. 1, Personal Electronic Device (PEA) 120) in a local area network (see FIG. 1, in a local network 100; see col. 3, line 17-45), wherein the first frame includes a first address configured for use as a medium access control address for the station in the local area network (see FIG. 1,6, request frame uses a MAC/AMAC 610 as medium access control address of a PEA in local network 100; see col. 3, line 60-35,60 to col. 4, line 5; see col. 6, line 50-65; see col. 7, line 60 to col. 8, line 5; see col. 11, line 45-55), and

receive a third frame (see FIG. 11, S1150, receiving/listening attach confirmation message) from the station via said local area network (see col. 11, line 58-65; receiving/listening attached confirmation message from a PEA 120 in local network), wherein said third frame includes a second address (see FIG. 6, 11, a new assigned address is created based on combined address/tag of a MAC/AMAC 610 and stream no. 620), configured for use as the medium access control address for said station in

said local area network (see col. 11, line 59-65; a new address is assigned as a new MAC address for PEA 120);

a processor (see FIG. 2, digital control logic (DCL) 220; see FIG. 4, DCL 460) configured to assign an association identifier to said station (see col. 4, line 10-42; col. 6, line 50-65; DCL places/assigns stream number 620 to PEA 120; also see col. 8, lines 14-26); and

a transmitter (see FIG. 2, a transmitting means in a RF transceiver 230; see col. 4, line 40-15) configured to:

transmit a second frame (see FIG. 11, S1140, sending an attached assign message) to said station via said local area network (see FIG. 1, to PEA 120 via local network 100; see col. 11, line 59-65), wherein said second frame comprises said association identifier (see FIG. 6, stream no. 620; see col. 6, line 50-65) and includes the first address configured for use as the medium access control address for said station in said local area network (see FIG. 11, S1140, assign message includes stream no. and MAC/AMAC 610 of PEA 120 as a new assigned address in a local network; see col. 11, line 55-65);

wherein said second address (see FIG. 6, 11, a new assigned address is created based on combined address/tag of a MAC/AMAC 610 and stream no. 620) is a combination of (1) a portion of said first address (see FIG. 6, AMAC 610) and (2) at least a portion of said association identifier (see FIG. 6, stream no. 620; see col. 10, line 50-65; see col. 11, line 30-65; a new assigned address is created based on combined address/tag of a portion/share/piece of MAC/AMAC 610 and a portion/share/piece of

stream no. 620; also see col. 8, lines 13-26 and lines 48-51, disclosing that each "token", which is an embodiment of a second address, includes a MAC address 610 and a stream number 620, further teaching this limitation).

Donaghey does not expressly disclose wherein the association identifier uniquely identifies the station.

Bantz discloses wherein the association identifier uniquely identifies the station (Fig. 2(a) and col. 7, lines 29-60, disclosing that a "base station ... uniquely associate[s] the local identifier [i.e., "LOCid" in table 230 in Fig. 2, i.e., the "association identifier"] and the MAC address of a mobile station owned [i.e., controlled] by the base station", thus teaching "wherein the association identifier uniquely identifies the station").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the teachings as disclosed in Bantz, in conjunction with the teachings as disclosed and taught by Donaghey. In particular, Bantz and Donaghey are combinable to teach and disclose "a processor configured to assign an association identifier to the station, wherein the association identifier uniquely identifies the station". The suggestion or motivation would have been to provide more robust and efficient methods of data transmission. (Bantz, col. 1, lines 5-10 and col. 2, lines 39-45; Donaghey, col. 1, lines 15-55).

7. **Regarding Claim 1**, see rejection for Claim 11, which teaches the limitations in Claim 1. In particular please note that Bantz discloses an access point that receives frames from mobile stations (Fig. 1, base stations 26, 28) and that assigns an association identifier to such mobile stations (Fig. 2(a) and col. 7, lines 29-60, disclosing

that "each base station maintains a cell members table 230 consisting in a list of n entries, each entry comprising the local identifiers (LOCid) ..." and a "base station ... uniquely associate[s] the local identifier [i.e., "LOCid" in table 230 in Fig. 2, i.e., the "association identifier"] and the MAC address of a mobile station owned [i.e., controlled] by the base station", thus teaching "access point that assigns an association identifier to mobile stations"). Thus, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the teachings as disclosed in Bantz, in conjunction with the teachings as disclosed and taught by Donaghey. In particular, Bantz and Donaghey are combinable to teach and disclose "receiving a first frame at an access point from a station in a local area network" and "assigning, at the access point, an association identifier to the station". The suggestion or motivation would have been to provide more robust and efficient methods of data transmission. (Bantz, col. 1, lines 5-10 and col. 2, lines 39-45; Donaghey, col. 1, lines 15-55).

8. **Regarding Claim 6 and 16**, Donaghey discloses an apparatus (see FIG. 1, 3, Personal Electronic Device (PEA) 120) processing a method (see FIG. 11, method) comprising:

a transmitter (see FIG. 3, a transmitting means in a RF transceiver 330; see col. 4, line 45-52) configured to:

transmit a first frame (see FIG. 11, S1120-1130, see FIG. 12, S1230, sending attached request frame) from said apparatus (see FIG. 1, from Personal Electronic Device (PEA) 120) in a local area network (see FIG. 1, in a local network 100; see col. 3, line 17-45), wherein said first frame includes a first address configured for use as a

medium access control address for said apparatus in said local area network (see FIG. 1, 6, request frame uses a MAC/AMAC 610 as medium access control address of a PEA in local network 100; see col. 3, line 60-35, 60 to col. 4, line 5; see col. 6, line 50-65; see col. 7, line 60 to col. 8, line 5; see col. 11, line 45-55; see col. 12, line 20-26), and

transmitting a third frame (see FIG. 11, S1150, see FIG. 12, S1250, attach confirmation message) from the apparatus via said local area network (see col. 11, line 58-65; see col. 12, line 30-35; sending attached confirmation message from a PEA 120 in local network), wherein said third frame includes a second address (see FIG. 6, 11, a new assigned address is created based on combined address/tag of a MAC/AMAC 610 and stream no. 620), configured for use as the medium access control address for said apparatus in said local area network (see col. 11, line 59-65; a new address is assigned as a new MAC address for PEA 120); and

a receiver (see FIG. 3, a receiving means in a RF transceiver 330; see col. 4, line 45-52) configured to:

receive a second frame (see FIG. 11, S1140, see FIG. 12, S1240; receiving an attached assign message) at said apparatus via said local area network (see FIG. 1, at PEA 120 via local network 100; see col. 11, line 59-65; see col. 12, line 25-30), wherein said second frame comprises an association identifier (see FIG. 6, stream no. 620; see col. 6, line 50-65) and the first address configured for use as the medium control access address for said apparatus in said local area network (see FIG. 11, S1140, assign message includes stream no. and MAC/AMAC 610 of PEA 120 as a new assigned address in a local network; see col. 11, line 55-65);

wherein said second address (see FIG. 6, 11, a new assigned address is created based on combined address/tag of a MAC/AMAC 610 and stream no. 620) is a combination of (1) at least a portion of said first address (see FIG. 6, AMAC 610) and (2) at least a portion of said association identifier (see FIG. 6, stream no. 620; see col. 10, line 50-65; see col. 11, line 30-65; a new assigned address is created based on combined address/tag of a portion/share/piece of MAC/AMAC 610 and a portion/share/piece of stream no. 620; also see col. 8, lines 13-26 and lines 48-51, disclosing that each "token", which is an embodiment of a second address, includes a MAC address 610 and a stream number 620, further teaching this limitation).

Bantz discloses wherein the association identifier uniquely identifies the station (Fig. 2(a) and col. 7, lines 29-60, disclosing that a "base station ... uniquely associate[s] the local identifier [i.e., "LOCid" in table 230 in Fig. 2, i.e., the "association identifier"] and the MAC address of a mobile station owned [i.e., controlled] by the base station", thus teaching "wherein the association identifier uniquely identifies the station").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the teachings as disclosed in Bantz, in conjunction with the teachings as disclosed and taught by Donaghey. In particular, Bantz and Donaghey are combinable to teach and disclose "wherein the second frame comprises an association identifier that uniquely identifies the station". The suggestion or motivation would have been to provide more robust and efficient methods of data transmission. (Bantz, col. 1, lines 5-10 and col. 2, lines 39-45; Donaghey, col. 1, lines 15-55).

9. **Regarding Claims 2,7, 12 and 17**, Donaghey and Bantz disclose and teach the method as in the respective parent claims.

Donaghey discloses said association identifier is unique among all stations that are currently active in said local area network (Fig. 2(a) and col. 7, lines 1-60, disclosing that a "base station ... uniquely associate[s] the local identifier [i.e., "LOCid" in table 230 in Fig. 2, i.e., the "association identifier"] and the MAC address of a mobile station owned [i.e., controlled] by the base station", thus teaching "wherein the association identifier uniquely identifies the station", thus teaching this limitation).

10. **Regarding Claims 3 and 13**, Donaghey and Bantz disclose and teach the method as in the respective parent claims.

Donaghey discloses transmitting a fourth frame (see FIG. 11, S1160, see FIG. 12, S1260; sending attached confirmation acknowledgment message from a hub) to said station via said local area network (see col. 11, line 65 to col. 12, line 5; to PEA 120 via a local network), wherein said fourth frame includes the second address configured for use as the medium access control address for said station in said local area network (see col. 11, line 65 to col. 12, line 5,35-40; confirmation acknowledgment message uses a new address as a new MAC address for PEA 120 in local area network).

11. **Regarding Claims 8 and 18**, Donaghey and Bantz disclose and teach the method as in the respective parent claims.

Donaghey discloses receiving a fourth frame (see FIG. 11, S1160, see FIG. 12, S1260; receiving attached confirmation acknowledgment message at PEA) at said apparatus via said local area network (see col. 11, line 65 to col. 12, line 5; at PEA 120

via a local network), wherein said fourth frame includes the said second address configured for use as the medium access control address for said apparatus in said local area network (see col. 11, line 65 to col. 12, line 5,35-40; confirmation acknowledgment message uses a new address as a new MAC address for PEA 120 in local area network).

12. **Regarding 5,10, 15 and 20**, Donaghey and Bantz disclose and teach the method as in the respective parent claims.

Donaghey discloses wherein said first address is 48 bits in length (see FIG. 1,6, a MAC 610 as medium access control address of a PEA in local network 100; see col. 3, line 60-35,60 to col. 4, line 5; see col. 6, line 50-65; see col. 7, line 60 to col. 8, line 5; see col. 11, line 45-55; note that it clear that, MAC address must have 48 bits in length; see cited Newton's telecom dictionary per IEE 802 standard, page 411).

13. **As to Claim 21**, Donaghey and Bantz disclose and teach the method as in the parent claim 1.

Donaghey discloses further comprising generating, at the hub, the second address (col. 10, line 46 - col. 11, line 19 and col. 11, lines 45-65 and Fig. 11, "HUB assigns and sends mac address to unattached pea at amac address", thus teaching this limitation).

Bantz teaches "at the access point" (Fig. 2(a) and col. 7, lines 29-60, disclosing that "each base station maintains a cell members table 230 consisting in a list of n entries, each entry comprising the local identifiers (LOCid) ..." and a "base station ... uniquely associate[s] the local identifier [i.e., "LOCid" in table 230 in Fig. 2, i.e., the

"association identifier"] and the MAC address of a mobile station owned [i.e., controlled] by the base station", thus teaching "access point that assigns an association identifier to mobile stations").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the teachings as disclosed in Bantz, in conjunction with the teachings as disclosed and taught by Donaghey. In particular, Bantz and Donaghey are combinable to teach and disclose "further comprising generating, at the access point, the second address". The suggestion or motivation would have been to provide more robust and efficient methods of data transmission. (Bantz, col. 1, lines 5-10 and col. 2, lines 39-45; Donaghey, col. 1, lines 15-55).

14. **As to Claim 23**, please see rejection for Claim 21.

15. **As to Claim 22**, Donaghey and Bantz disclose and teach the method as in the parent claim 6.

Donaghey discloses further comprising generating, at the station, the second address (col. 10, line 46 - col. 11, line 19 and col. 11, lines 45-65 and Fig. 11, "HUB assigns and sends mac address to unattached pea at amac address", followed by the PEA, i.e., the "station", sending a confirmation to the hub/access point at the new assigned mac address in step 1150, thus steps 1140 and 1150 teach a process for "generating" the second address that is distributed across the Hub/access point and the PEA/station, and step 1150 thus teaches the PEA/station participating in the "generation" (by sending confirmation) of such second address, thus teaching this limitation).

16. **As to Claim 24**, please see rejection for Claim 21.

2. **Claims 4,9,14 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Donaghey, in view of U.S. Patent No. 5,519,706 to Bantz et al., further in view of Cannon (US006067444A)

Regarding Claims 4,9,14 and 19, Donaghey and Bantz disclose and teach the method as in the respective parent claims and wherein the association identifier has a length as set forth above in claims 1,6,11 and 15.

Donaghey does not explicitly disclose 11 bits. However, Cannon teaches association identifier has 11 bits in length (see FIG. 6, Frame/stream information (FI) word has 11 bits; see col. 11, line 16-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide 11 bits length, as taught by Cannon in the system of Donaghey, so that it would provide 11 bits wide/worth frame and cycle numbers; see Cannon col. 11, line 20-25.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHENG whose telephone number is (571)272-9021. The examiner can normally be reached on M-Th, 8:00AM - 5:00PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick W. Ferris can be reached on (571)272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 2463

/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 2463